



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

u

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,509	02/02/2001	Hirofumi Miyajima	046124-5060	3310

9629 7590 12/30/2003
MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER

JACKSON, CORNELIUS H

ART UNIT PAPER NUMBER

2828

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/773,509

Applicant(s)

MIYAJIMA ET AL.

Examiner

Cornelius H. Jackson

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


PAUL IP
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Acknowledgment

1. Acknowledgment is made that applicant's Amendment, filed on 15 October 2003, has been entered. Upon entrance of the Amendment, claims 1-12 were amended, claim 13 was canceled, and claims 20 and 21 were added. Claims 1-12 and 14-21 are now pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-12 and 14-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Takigawa et al. (6097744). Regarding claim 1, Takigawa et al. disclose a heat sink (**Figs. 2A-E, 4A-11B, see Figs 4A-C.**) comprising a first planar member **31** having a first main face and a second main face, the second main face having a first depressed portion thereon **31C,31D**; a second planar

Art Unit: 2828

member **33** having a first main face and a second face, the first main face having a second depressed portion thereon, **see 33C,33D col. 18, lines 36-40**; and a partition **32** member sandwiched between the second main face **31C,31D** of the first planar member **31** and the first main face **33C,33D** of the second planar member **33**, and formed with a main first face and a main second face, the partition member having a plurality of holes **32C** passing through the first and the second main faces thereof, each of the plurality of holes having a substantially flat wall extending from the first main face of the partition member to the second main face of the partition member, the first main face of the partition member and the first depressed portion defining a first space having side walls with rounded corner portions at a location proximate the plurality of holes, the second main face of the partition member and the second depressed portion defining a second space having side walls with rounded corner portions at a location proximate the plurality of holes, the holes communicating the first space with the second space with areas in the first space which correspond to the holes being substantially spatially continuous and free of any dividing members; and a supply port **31A** for supplying a fluid into the second space; a discharge port **31B** for discharging the fluid from the first space; and a first guide member provided in the second space for controlling flow of the fluid in the second space from the supply port to an area in the first space corresponding to the holes, **see col. 17, line 64-col. 20, line 19 and col. 33, line 56-col. 34, line 32**.

Regarding claims 2-11, 20 and 21, Takigawa et al. disclose all the stated limitations, **see Figs. 36A-D and col. 33, line 56-col. 34, line 32**.

Art Unit: 2828

Regarding claims 12 and 14-16, Takigawa et al. disclose all the stated limitations, **see Figs. 4A-D and col. 17, line 64-col. 18, line 48.**

Regarding claims 17-19, Takigawa et al. disclose all the stated limitations, **see Figs. 14A-16 and col. 24, line 63-col. 26, line 11.**

Response to Arguments

4. Applicant's arguments filed 15 October 2003 have been fully considered but they are not persuasive.

Applicant argued that Takigawa et al. does not disclose or suggest the combination of a first and second spaces each having side walls with rounded corner portions at a location proximate holes communicating the first and second spaces.

In response, Takigawa et al. does teach side walls with rounded corner portions at a location proximate holes communicating the first and second spaces as can be seen in Figs. 8A-C.

Applicant argued that Takigawa et al. does not disclose or suggest the combination of the first space is formed in part by an integrally formed first and second member, see Figs. 2A-2D.

In response, Takigawa et al. does disclose the combination of the first space is formed in part by an integrally formed first and second member, as can be seen in Figs. 4A-4D and not the prior art Figs. 2A-2D.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bland et al. (4494171) and Lapinski et al. (5005640) both disclose the claimed invention.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cornelius H. Jackson whose telephone number is (703) 306-5981 [(703) 272-1942, after January 2004]. The examiner can normally be reached on 8:00 - 5:00, Monday - Friday.

Art Unit: 2828

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098 [(703) 272-1941, after January 2004]. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.



chj



PAUL IP
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800